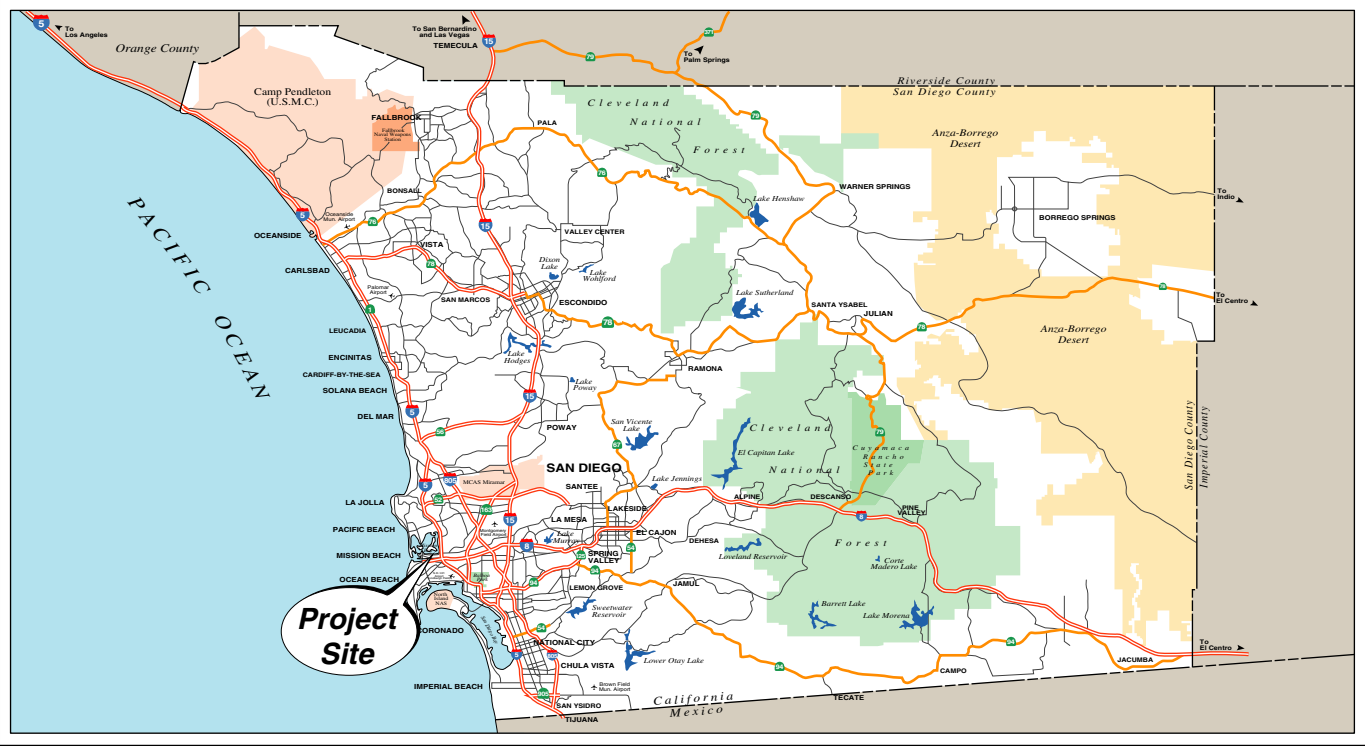


FIGURES



REGIONAL SITE LOCATION

North
(Not to scale)



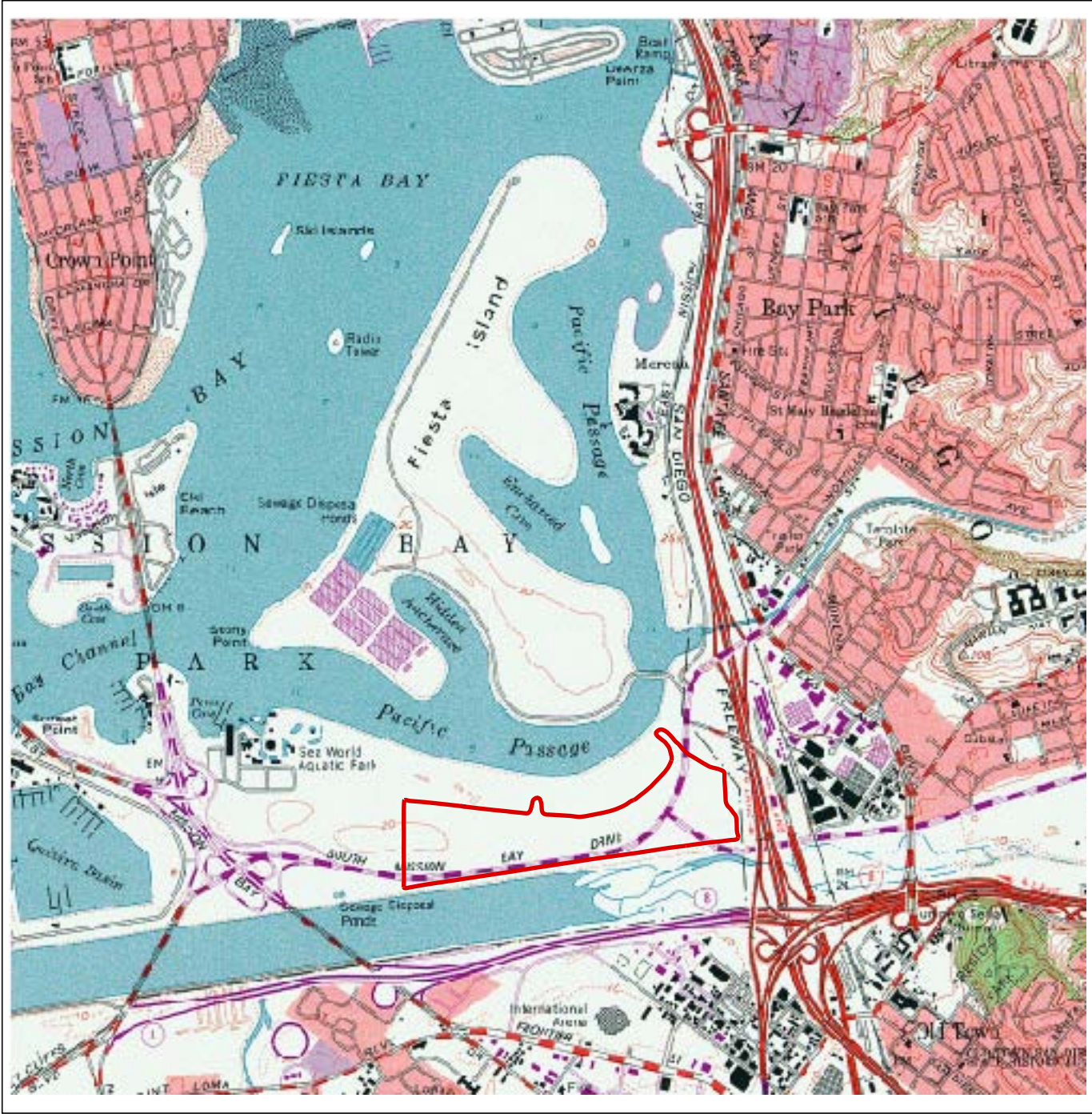
Note: Digital ortho-photograph provided to SCS by City of San Diego. Photograph dated March 2002.

SITE AERIAL PHOTOGRAPH



Interpreted landfill boundary. Dashed line indicates areas where additional assessment would assist detailed landfill delineation.

North
(Not to scale)



Reference:
U.S.G.S. 7.5 Minute Quadrangle map
"La Jolla, California" - 1977. Photo revised 1982.

U.S.G.S. TOPOGRAPHIC MAP

0 1000 2000 3000
Approximate Graphic Scale in Feet



Interpreted landfill boundary

North

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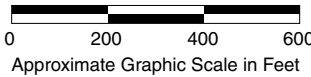
3-WAY SITE LOCATION MAP
City of San Diego
Mission Bay Landfill
San Diego, California

Project No.:
01203520.00
Figure 1.1
Date Drafted:
6/15/05

Disclaimer: This figure is based on available data. Actual conditions may differ. All locations and dimensions are approximate.



Note: Digital ortho-photograph provided to SCS by City of San Diego. Photograph dated March 2002.
 Disclaimer: This figure is based on data provided by others. Actual conditions may differ. All locations and dimensions are approximate.



EXPLANATION

	San Diego River channel in January 1952		December 1953		March 1958		Landfill delineation
	"Early" 1953		November 1956		"Late" 1958		

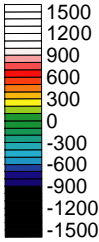







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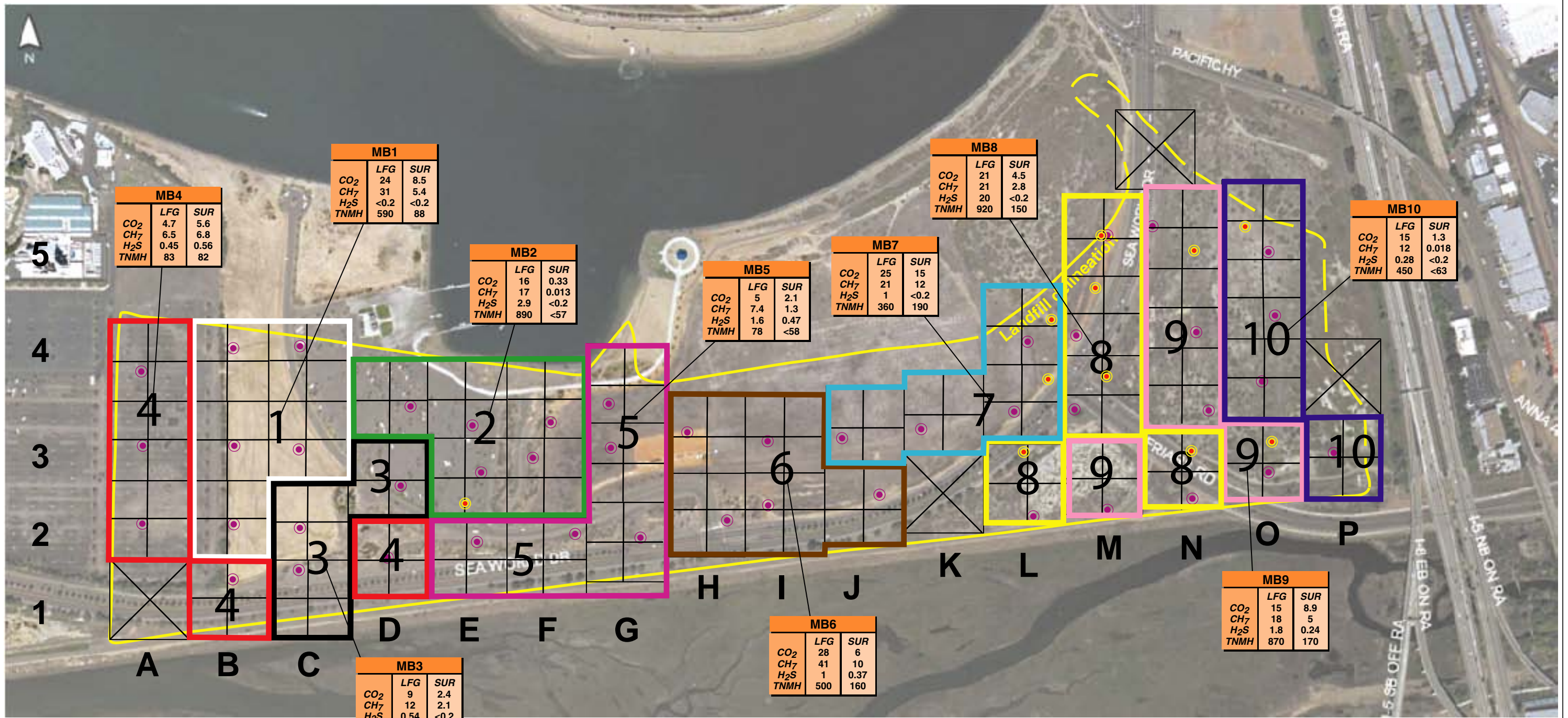
LANDFILL PHASES
 City of San Diego
 Mission Bay Landfill
 San Diego, California

Project No.:
 01203520.00
Figure 2.1
Date Drafted:
 3/2/04



Note: Digital ortho-photograph provided to SCS by City of San Diego. Photograph dated March 2002.
Disclaimer: This figure is based on data provided by others. Actual conditions may differ. All locations and dimensions are approximate.

EXPLANATION		SCS ENGINEERS		MAGNETIC GRADIOMETER SURVEY RESULTS		Project No.: 01203520.00	
	Gradient Field (gamma)		EM34 Survey		Location and designation of existing monitoring wells.	 Approximate Graphic Scale in Feet	
	Interpreted landfill boundary.		Boring location and designation where no soil and groundwater samples were collected for chemical analysis.		Boring location and designation where soil and/or groundwater samples were collected for chemical analysis.		
	Area suspected to contain buried metallic debris			ENVIRONMENTAL CONSULTANTS 8799 Balboa Avenue, Suite 290 San Diego, California 92123		City of San Diego Mission Bay Landfill San Diego, California	
						Figure 5.1	
						Date Drafted: 4/27/06	



Note: Digital ortho-photograph provided to SCS by City of San Diego. Photograph dated March 2002.
Disclaimer: This figure is based on data provided by others. Actual conditions may differ. All locations and dimensions are approximate.

0 200 400 600
Approximate Graphic Scale in Feet

MB1-LFG/SUR collected on 5/25/04

MB2-LFG/SUR and MB3-LFG/SUR collected on 5/26/04

MB4-LFG/SUR and MB5-LFG/SUR collected on 5/27/04

MB6-LFG/SUR and MB7-LFG/SUR collected on 5/27/04

MB8-LFG/SUR collected on 6/1/04

MB9-LFG/SUR and MB10-LFG/SUR collected on 6/2/04



No sample collected in this cell

Landfill gas and near-surface landfill gas sample location.
Samples collected on May 25, 2004 to June 2, 2004.



Additional landfill gas sample location.
Sample collected on July 21, 2004.

CO₂ = carbon dioxide
CH₄ = methane
H₂S = hydrogen sulfide
TNMH = total non-methane hydrocarbons as methane
LFG = landfill gas sample
SUR = near surface sample

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**LANDFILL GAS AND NEAR-SURFACE
SAMPLE LOCATIONS AND COMPOSITE
SAMPLE GROUPING**
City of San Diego
Mission Bay Landfill
San Diego, California

Project No.:
01203520.00








Figure 5.2

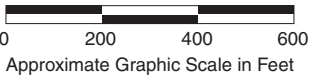
Date Drafted:
4/24/06



Note: Digital ortho-photograph provided to SCS by City of San Diego. Photograph dated March 2002.
Disclaimer: This figure is based on data provided by others. Actual conditions may differ. All locations and dimensions are approximate.

EXPLANATION

- | | |
|---|---|
|  Drive point locations |  Boring location and designation where no soil and groundwater samples were collected for chemical analysis. |
|  Sediment sample locations |  Boring location and designation where soil and/or groundwater samples were collected for chemical analysis. |
|  Surface soil sample location (0 to 12 inches below grade collected by discrete sampler) |  Location and designation of monitoring wells installed during current site assessment. |
| |  Location and designation of existing monitoring wells. |



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**SOIL BORING, MONITORING WELL, SEDIMENT,
SURFACE SOIL, AND DRIVE POINT
LOCATIONS**
City of San Diego
Mission Bay Landfill
San Diego, California

Project No.:
01203520.00
Figure 5.3
Date Drafted:
9/6/06



Note: Digital ortho-photograph provided to SCS by City of San Diego. Photograph dated March 2002.
Disclaimer: This figure is based on data provided by others. Actual conditions may differ. All locations and dimensions are approximate.

EXPLANATION

- Landfill gas well (five) installed by Woodward Clyde in March 1981.
- Soil borings (twenty) advanced by Woodward Clyde (April 1981).
- Landfill gas wells (five) installed by Woodward Clyde (September 1983).
- Monitoring wells (twenty-five) installed by Woodward Clyde (September 1983).

- Monitoring wells installed by Ninyo & Moore in October 1993 (six wells) and December 1996 (two replacement wells). Wells are designated as MBW-1 through MBW-6, and MBE-4 and MBE-6.
- Boring location and designation where soil and/or groundwater samples were collected for chemical analysis by SCS Engineers (2004).
- Monitoring wells (four) installed by SCS Engineers (September 2004).

MB-16-WA-03	
Depth	9 - 16
As	60.4
Cr	140
Cu	377
Pb	132
Zn	1,387

Soil sample laboratory analytical data collected by Woodward Clyde in 1983. Soil sample depth(s) indicated, where known (please note, some samples are composite samples and representative of samples collected within landfill waste, and some are samples collected from soil where landfill waste was not present. According to historical reports, the WA designation in the sample name indicates a sample collected from within landfill waste, whereas a sample with the SB designation does not. In many cases, the actual depth of the sample could not be reconciled). Only selected metals have been presented as a representative sample population. Soil sample results reported in milligrams per kilogram (mg/kg).

B6	
Depth	5.5'
As	3.70
Cd	<0.50
Cr	28.2
Cu	3.56
Pb	<0.20
Hg	<0.50
Tl	<0.50
Cr6+	NA

All soil samples were analyzed for Title 22 Metals in general accordance with EPA Method 6010B/7470A and selected samples were analyzed for hexavalent chromium in general accordance with EPA Method 7199. Results are reported in milligrams per kilogram (mg/kg). NA indicates not analyzed. < indicates sample result reported as less than the indicated laboratory detection limit for the analytical method used.

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**HISTORICAL AND RECENT ANALYTICAL
DATA FOR METALS IN SOIL**
City of San Diego
Mission Bay Landfill
San Diego, California

Project No.:
01203520.00
Figure 5.4
Date Drafted:
4/24/06





Note: Digital ortho-photograph provided to SCS by City of San Diego. Photograph dated March 2002.
Disclaimer: This figure is based on data provided by others. Actual conditions may differ. All locations and dimensions are approximate.

EXPLANATION

- Landfill gas well (five) installed by Woodward Clyde in March 1981.
- Soil borings (twenty) advanced by Woodward Clyde (April 1981).
- Landfill gas wells (five) installed by Woodward Clyde (September 1983).
- Monitoring wells (twenty-five) installed by Woodward Clyde (September 1983).

- Monitoring wells installed by Ninyo & Moore in October 1993 (six wells) and December 1996 (two replacement wells). Wells are designated as MBW-1 through MBW-6, and MBE-4 and MBE-6.
- Boring location and designation where soil and/or groundwater samples were collected for chemical analysis.

- Monitoring wells (four) installed by SCS Engineers (September 2004).

SCS1					
Depth	5'	10'	20'	25'	30'
Bis	586	<330	<330	<330	<330

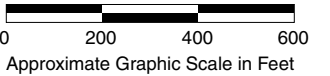
Bis = Bis(2-ethylhexyl)phthalate. Soil samples were analyzed for semivolatile organic compounds (SVOCs) in general accordance with EPA Method 8270. Please note that bis(2-ethylhexyl)phthalate was the only SVOC analyte reported to be above the laboratory detection limit. Samples collected by SCS Engineers on September 13 and 14, 2004. < indicates same result reported less than the specified laboratory detection limit.

B9
SVOCs ND

All soil samples were analyzed for semivolatile organic compounds (SVOCs) in general accordance with EPA Method 8270C. The reported concentrations of SVOCs were below the respective laboratory detection limits in all samples. ND indicates not detected above laboratory detection limits.

MB-09-WA-09	
Depth	10.5-32.5
Carbon Tetrachloride	<0.2
Methylene Chloride	<0.2
Benzo (a) pyrene	<0.1
Chrysene	0.165
Butyl benzyl phthalate	<0.1

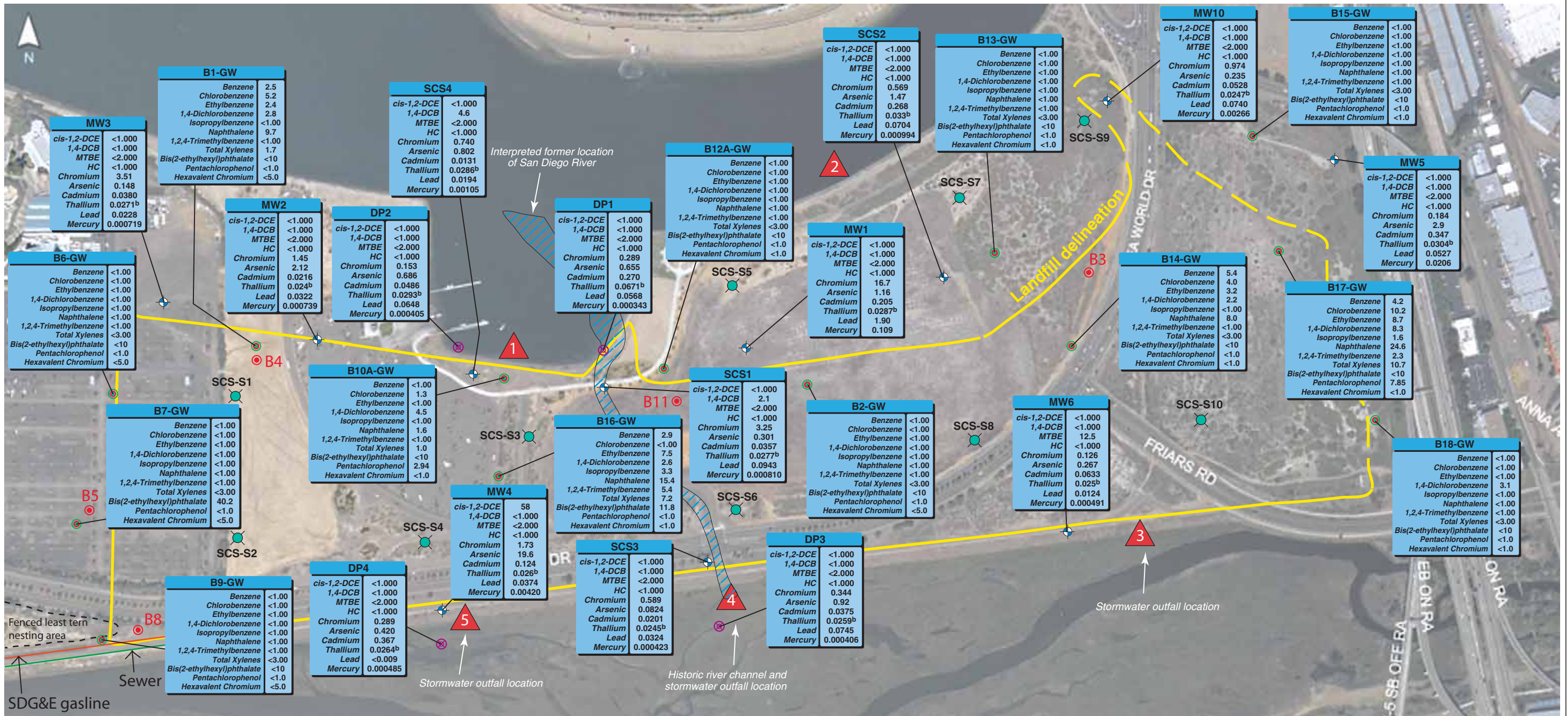
Selected soil sample laboratory analytical data collected by Woodward Clyde in 1983. Soil sample depth(s) indicated, where known. Please note, some samples are composite samples and representative of samples collected within landfill waste. Only selected organic compounds have been presented as a representative sample population. All soil sample results reported in milligrams per kilogram (mg/kg). NS = not sampled.



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**HISTORICAL AND RECENT ANALYTICAL DATA
FOR VOCs AND SVOCs IN SOIL**
City of San Diego
Mission Bay Landfill
San Diego, California

Project No.:
01203520.00
Figure 5.5
Date Drafted:
4/24/06



Note: Digital ortho-photograph provided to SCS by City of San Diego. Photograph dated March 2002.
Disclaimer: This figure is based on data provided by others. Actual conditions may differ. All locations and dimensions are approximate.

EXPLANATION

Drive point locations

MW2 Location and designation of existing monitoring wells

Surface soil sample location (0 to 12 inches below grade collected by drive sampler)

Boring location and designation where soil and groundwater was not sampled for chemical analysis

Sediment sample locations

Boring location and designation where soil and/or groundwater samples were collected for chemical analysis.

MW4

cis-1,2-DCE

<1.000

1,4-DCB

<1.000

MTBE

<2.000

HC

<1.000

Chromium

1.73

Arsenic

19.6

Cadmium

0.124

Thallium

0.026^b

Lead

0.0374

Mercury

0.00420

Groundwater samples from monitoring wells were analyzed for semivolatile organic compounds (SVOCs) in general accordance with EPA Method 8270C, hexavalent chromium in general accordance with EPA Method 7199, mercury in general accordance with EPA Method 1631 and 16 other metals (beryllium, vanadium, chromium, cobalt, nickel, copper, zinc, arsenic, selenium, molybdenum, silver, cadmium, antimony, barium, thallium, and lead) in general accordance with EPA Method 1669/1640. Results reported in micrograms per liter (µg/L). < indicates sample result reported as less than the indicated laboratory detection limit for the analytical method used. B indicates sample results are less than 5x the blank.

cis-1,2-DCE = cis-1,2-Dichloroethene

1,4-DCB = 1,4-Dichlorobenzene

MTBE = methyl tertiary butyl ether

HC = Hexavalent chromium

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RECENT GROUNDWATER AND PORE WATER SAMPLE ANALYTICAL RESULTS

City of San Diego

Mission Bay Landfill

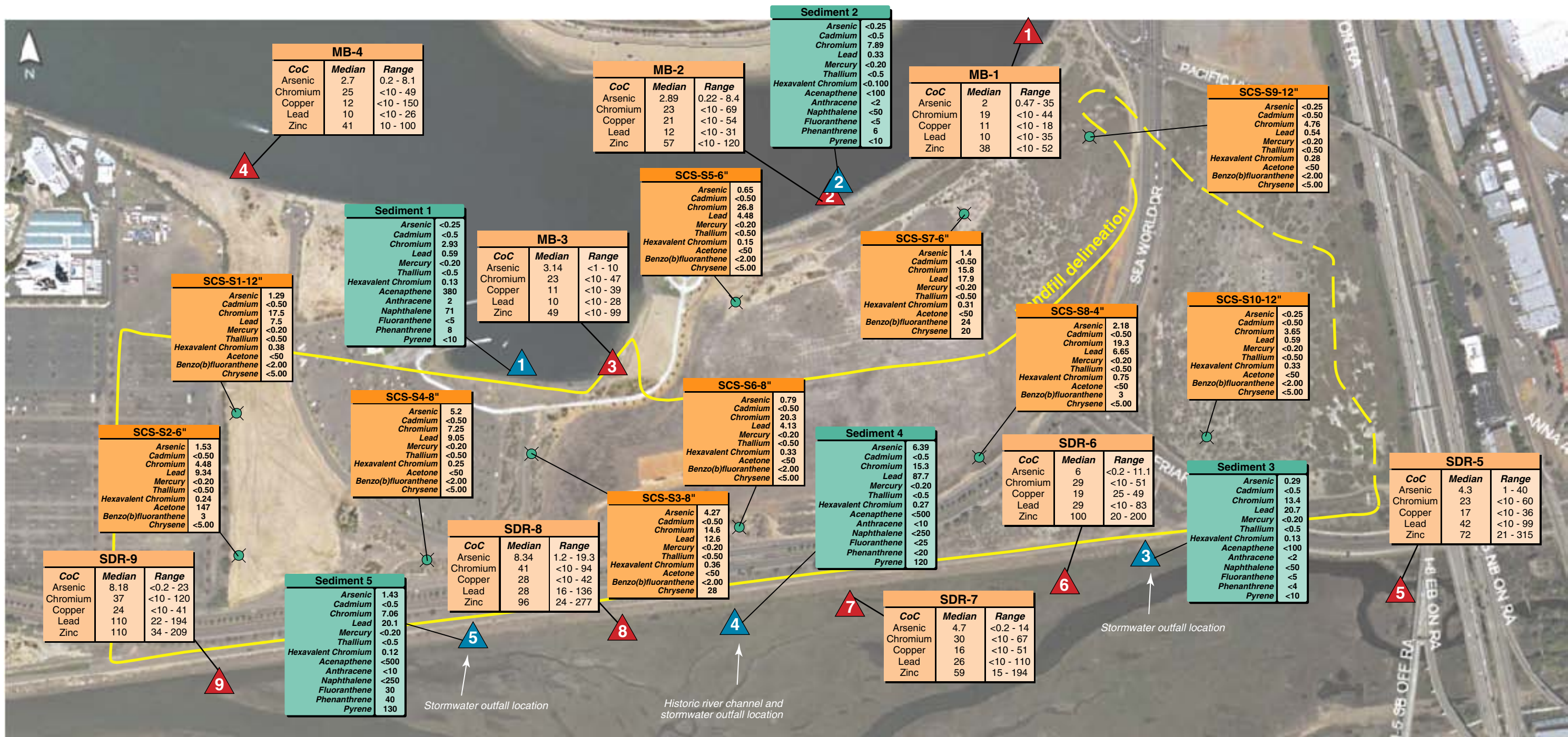
San Diego, California

Project No.: 01203520.00

Figure 5.6

Date Drafted: 9/6/06

Approximate Graphic Scale in Feet



Note: Digital ortho-photograph provided to SCS by City of San Diego. Photograph dated March 2002.
Disclaimer: This figure is based on data provided by others. Actual conditions may differ. All locations and dimensions are approximate.

EXPLANATION



Historical sediment sample location. All locations are approximate.



Sediment sample locations.



Surface soil sample location (0 to 12 inches below grade collected by hand auger).

SCS-S2-6"		
Arsenic	1.53	
Cadmium	<0.50	
Chromium	4.48	
Lead	9.34	
Mercury	<0.20	
Thallium	<0.50	
Hexavalent Chromium	0.24	
Acetone	147	
Benzo(b)fluoranthene	3	
Chrysene	<5.00	

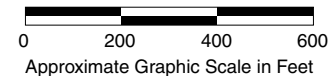
Sediment 5		
Arsenic	1.43	
Cadmium	<0.5	
Chromium	7.06	
Lead	20.1	
Mercury	<0.20	
Thallium	<0.5	
Hexavalent Chromium	0.12	
Acenaphthene	<500	
Anthracene	<10	
Naphthalene	<250	
Fluoranthene	30	
Phenanthrene	40	
Pyrene	130	

Surface soil samples were analyzed for California Code of Regulations (CCR) Title 22 Metals and hexavalent chromium in general accordance with EPA Method 6010B/7471A and EPA Method 7199, respectively. Results for metals reported in milligrams per kilogram (mg/kg). Results for volatile organic compounds (VOCs) [Acetone being the only VOC analyte reported above laboratory detection limits] and polynuclear aromatic hydrocarbons (PAHs) (EPA Method 8310) reported in micrograms per kilogram ($\mu\text{g/kg}$). < indicates sample result reported less than the laboratory detection limit for the analytical method used.

Sediment samples were analyzed for California Code of Regulations (CCR) Title 22 Metals and hexavalent chromium in general accordance with EPA Method 6010B/7471A and EPA Method 7199, respectively. Results for selected metals reported in milligrams per kilogram (mg/kg). Results for polynuclear aromatic hydrocarbons (PAHs) (EPA Method 8310) reported in micrograms per kilogram ($\mu\text{g/kg}$). < indicates sample result reported less than the laboratory detection limit for the analytical method used.

MB-4		
CoC	Median	Range
Arsenic	2.7	0.2 - 8.1
Chromium	25	<10 - 49
Copper	12	<10 - 150
Lead	10	<10 - 26
Zinc	41	10 - 100

Sediment sample location with the median and the range of analytical data for the selected metal from the eleven annual sediment sampling events that were conducted from October 14, 1985 until November 15, 1995. Sampling events were conducted under Regional Water Quality Control Board (RWQCB) Order No. 85-78 by City of San Diego. Results reported in milligrams per kilogram (mg/kg).



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San Diego, California 92123

**HISTORICAL AND RECENT
SEDIMENT AND RECENT SURFACE
SOIL SAMPLE ANALYTICAL DATA**
City of San Diego
Mission Bay Landfill
San Diego, California

Project No.:
01203520.00










Figure 5.7

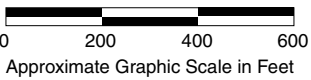
Date Drafted:
4/24/06



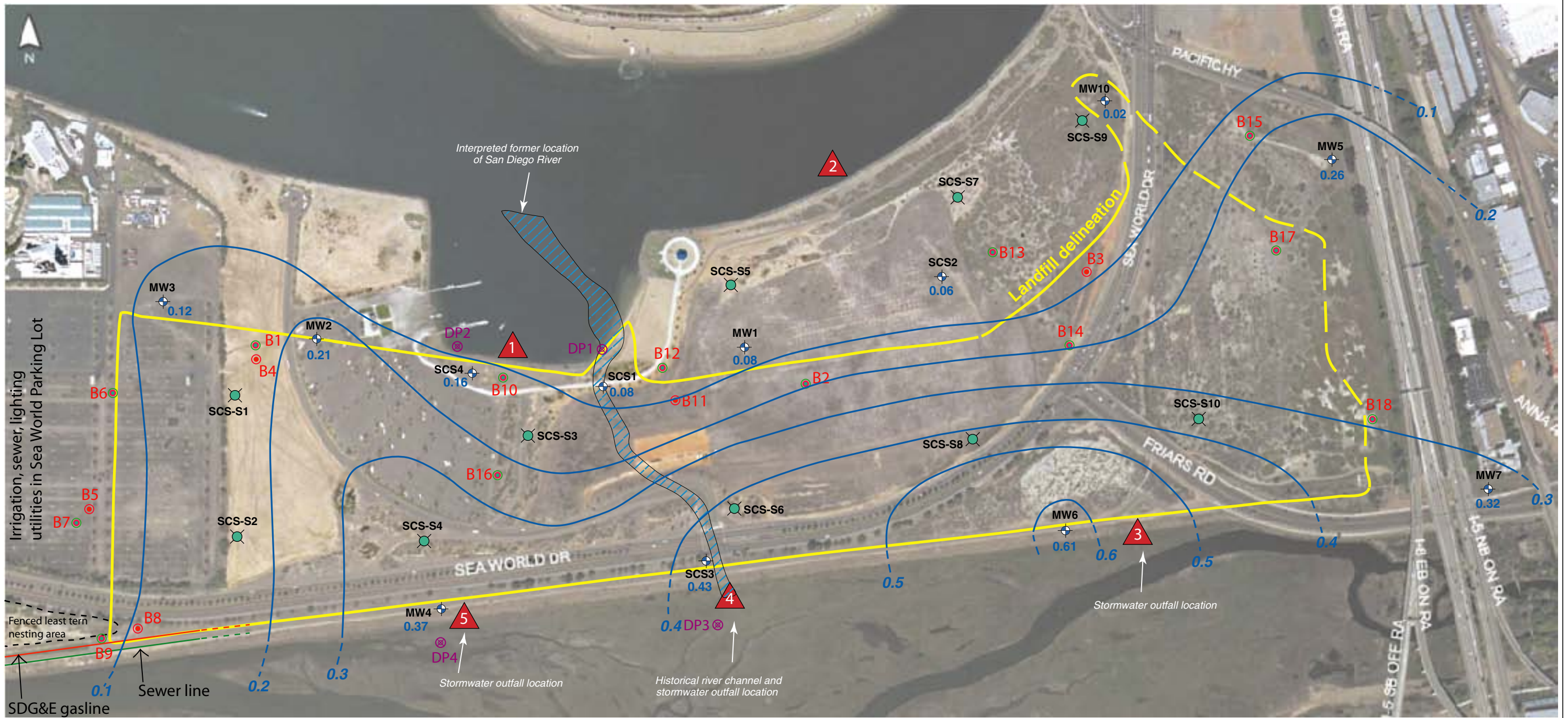
Note: Digital ortho-photograph provided to SCS by City of San Diego. Photograph dated March 2002.
Disclaimer: This figure is based on data provided by others. Actual conditions may differ. All locations and dimensions are approximate.

EXPLANATION

-  Drive point locations
-  Sediment sample locations
-  Interpreted groundwater flow direction.
-  Surface soil sample location (0 to 12 inches below grade collected by hand auger)
-  Boring location and designation where no soil and groundwater samples were collected for chemical analysis.
-  Boring location and designation where soil and/or groundwater samples were collected for chemical analysis.
-  Location and designation of existing monitoring wells.
-  Tidally averaged groundwater elevation in feet above mean sea level (MSL).
-  Estimated groundwater contour in feet above mean sea level.



SCS ENGINEERS ENVIRONMENTAL CONSULTANTS 8799 Balboa Avenue, Suite 290 San Diego, California 92123	GROUNDWATER ELEVATIONS October 16, 2004 at 12:00 pm City of San Diego Mission Bay Landfill San Diego, California		Project No.: 01203520.00
			Figure 5.8
			Date Drafted: 4/24/06



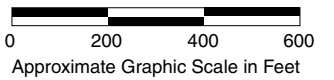
Note: Digital ortho-photograph provided to SCS by City of San Diego. Photograph dated March 2002.
Disclaimer: This figure is based on data provided by others. Actual conditions may differ. All locations and dimensions are approximate.

EXPLANATION

- Drive point locations
- Sediment sample locations
- Surface soil sample location (0 to 12 inches below grade collected by drive sampler)
- Location and designation of existing monitoring wells.
- Boring location and designation where no soil and groundwater samples were collected for chemical analysis.
- Boring location and designation where soil and/or groundwater samples were collected for chemical analysis.

0.43 Difference in feet of groundwater elevations observed in wells on October 16 and 28, 2004.

0.4 Estimated groundwater thickness contour in feet.



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			Figure 5.9
			Date Drafted: 4/24/06



Note: Digital ortho-photograph provided to SCS by City of San Diego. Photograph dated March 2002.
Disclaimer: This figure is based on data provided by others. Actual conditions may differ. All locations and dimensions are approximate.

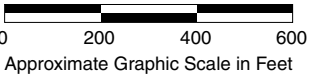
Please note that only soil boring and trench locations observed to penetrate landfill waste were used in the preparation of this figure.

EXPLANATION

- | | |
|--|--|
| Landfill gas well (five) installed by Woodward Clyde in March 1981. | Monitoring wells installed by Ninyo & Moore in October 1993 (six wells) and December 1996 (two replacement wells). Wells are designated as MBW-1 through MBW-6, and MBE-4 and MBE-6. |
| Soil borings (twenty) advanced by Woodward Clyde (April 1981). | Monitoring wells (four) installed by SCS Engineers (September 2004). |
| Landfill gas wells (five) installed by Woodward Clyde (September 1983). | Boring location and designation where no soil and groundwater samples were collected for chemical analysis. |
| Monitoring wells (twenty-five) installed by Woodward Clyde (September 1983). | Boring location and designation where soil and/or groundwater samples were collected for chemical analysis. |

- | |
|---|
| Approximate location of test pits completed by Woodward Clyde (February 19 and 20, 1980). |
| No trash observed |
| Observed landfill waste thickness |
| 5' Estimated thickness of waste in landfill |
| 10' |
| 15' |

Interpreted landfill boundary. Boundary location supported by aerial photographs as well as field data. Dashed line indicates areas where additional assessment would assist detailed landfill delineation.



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ESTIMATED LANDFILL WASTE THICKNESS
City of San Diego
Mission Bay Landfill
San Diego, California









Project No.:
01203520.00
Figure 6.1
Date Drafted:
4/27/06










Note: Digital ortho-photograph provided to SCS by City of San Diego. Photograph dated March 2002.
Disclaimer: This figure is based on data provided by others. Actual conditions may differ. All locations and dimensions are approximate.

Please note that only soil boring and trench locations observed to penetrate landfill waste were used in the preparation of this figure.

EXPLANATION

- | | |
|--|--|
|  Landfill gas well (five) installed by Woodward Clyde in March 1981. |  Monitoring wells installed by Ninyo & Moore in October 1993 (six wells) and December 1996 (two replacement wells). Wells are designated as MBW-1 through MBW-6, and MBE-4 and MBE-6. |
|  Soil borings (twenty) advanced by Woodward Clyde (April 1981). |  Monitoring wells (four) installed by SCS Engineers (September 2004). |
|  Landfill gas wells (five) installed by Woodward Clyde (September 1983). |  Boring location and designation where no soil and groundwater samples were collected for chemical analysis. |
|  Monitoring wells (twenty-five) installed by Woodward Clyde (September 1983). |  Boring location and designation where soil and/or groundwater samples were collected for chemical analysis. |

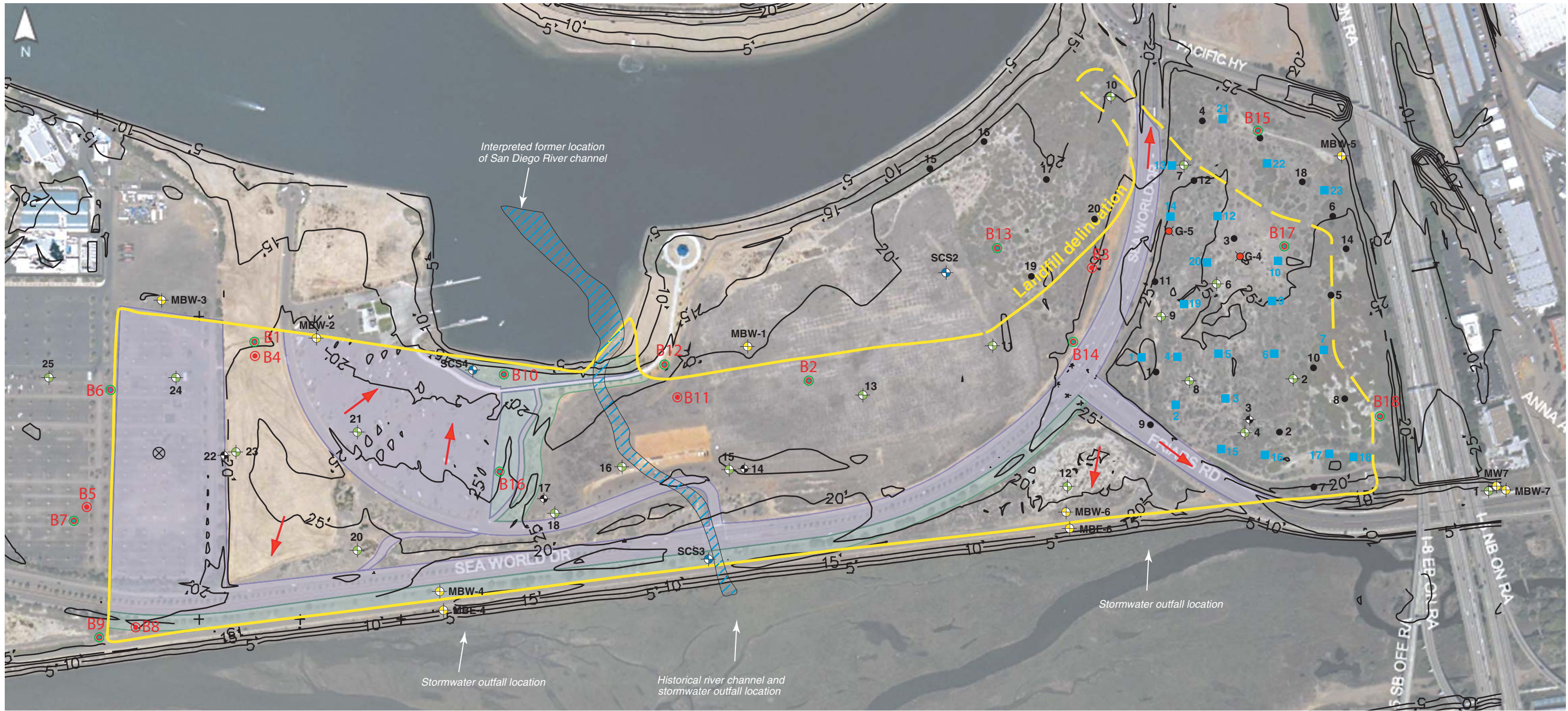
- | | |
|---|--|
|  Approximate location of test pits completed by Woodward Clyde (February 19 and 20, 1980). |  Landfill gas sample collection location with field screening measurement values for methane (reported in percent) above hydrogen sulfide (reported in parts per million (ppm)) at noted depth. |
|  No trash observed |  Interpreted landfill boundary. Dashed line indicates areas where additional assessment would assist detailed landfill delineation. |
|  LFG sample collection depth in feet below grade assumed to be below base of cover | |
|  Observed soil cover thickness in feet | |
|  Estimated thickness of soil cover. | |

0 200 400 600
Approximate Graphic Scale in Feet

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San Diego, California 92123









ESTIMATED LANDFILL SOIL COVER THICKNESS
City of San Diego
Mission Bay Landfill
San Diego, California




Project No.:
01203520.00
Figure 6.2
Date Drafted:
8/2/05






Note: Digital ortho-photograph provided to SCS by City of San Diego. Photograph dated March 2002.
 Disclaimer: This figure is based on data provided by others. Actual conditions may differ. All locations and dimensions are approximate.

EXPLANATION

- | | |
|--|--|
|  Landfill gas well (five) installed by Woodward Clyde in March 1981. |  Monitoring wells installed by Ninyo & Moore in October 1993 (six wells) and December 1996 (two replacement wells). Wells are designated as MBW-1 through MBW-6, and MBE-4 and MBE-6. |
|  Soil borings (twenty) advanced by Woodward Clyde (April 1981). |  Monitoring wells (four) installed by SCS Engineers (September 2004). |
|  Landfill gas wells (five) installed by Woodward Clyde (September 1983). |  Boring location and designation where soil and groundwater was not sampled for chemical analysis. |
|  Monitoring wells (twenty-five) installed by Woodward Clyde (September 1983). |  Boring location and designation where soil and/or groundwater samples were collected for chemical analysis. |

- | |
|---|
|  Approximate location of test pits completed by Woodward Clyde (February 19 and 20, 1980). |
|  Pavement |
|  Unpaved irrigated land |

- | |
|--|
|  Interpreted drainage flow direction. |
|  Generally flat |

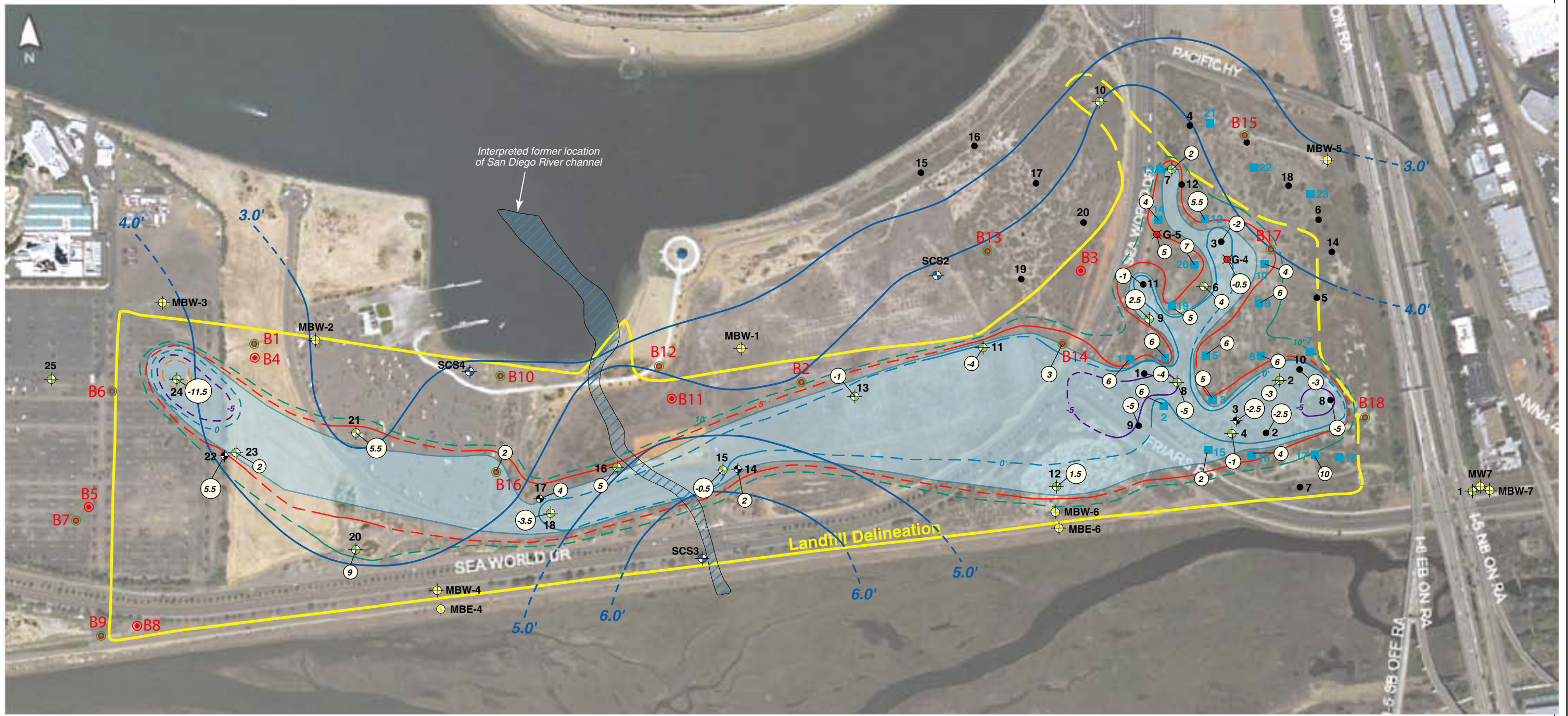
- | |
|--|
|  Interpreted landfill boundary. Dashed line indicates areas where additional assessment would assist detailed landfill delineation. |
|--|

0 200 400 600
 Approximate Graphic Scale in Feet

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 8799 Balboa Avenue, Suite 290
 San Diego, California 92123

SITE MAP SHOWING TOPOGRAPHY, INFILTRATION SURFACES, AND DRAINAGE FLOW DIRECTION
 City of San Diego
 Mission Bay Landfill
 San Diego, California

Project No.: 01203520.00
Figure 6.3
 Date Drafted: 7/5/05



Note: Digital ortho-photograph provided to SCS by City of San Diego. Photograph dated March 2002.
 Disclaimer: This figure is based on data provided by others. Actual conditions may differ. All locations and dimensions are approximate.

EXPLANATION

- Landfill gas well (five) installed by Woodward Clyde in March 1981.
- Soil borings (twenty) advanced by Woodward Clyde (April 1981).
- Landfill gas wells (five) installed by Woodward Clyde (September 1983).
- Monitoring wells (twenty-five) installed by Woodward Clyde (September 1983).

- Monitoring wells installed by Ninyo & Moore in October 1993 (six wells) and December 1996 (two replacement wells). Wells are designated as MBW-1 through MBW-6, and MBE-4 and MBE-6.
- Monitoring wells (four) installed by SCS Engineers (September 2004).
- Boring location and designation where no soil and groundwater samples were collected for chemical analysis.
- Boring location and designation where soil and/or groundwater samples were collected for chemical analysis.

Please note that only soil boring and trench locations observed to penetrate landfill waste were used in the preparation of this figure.

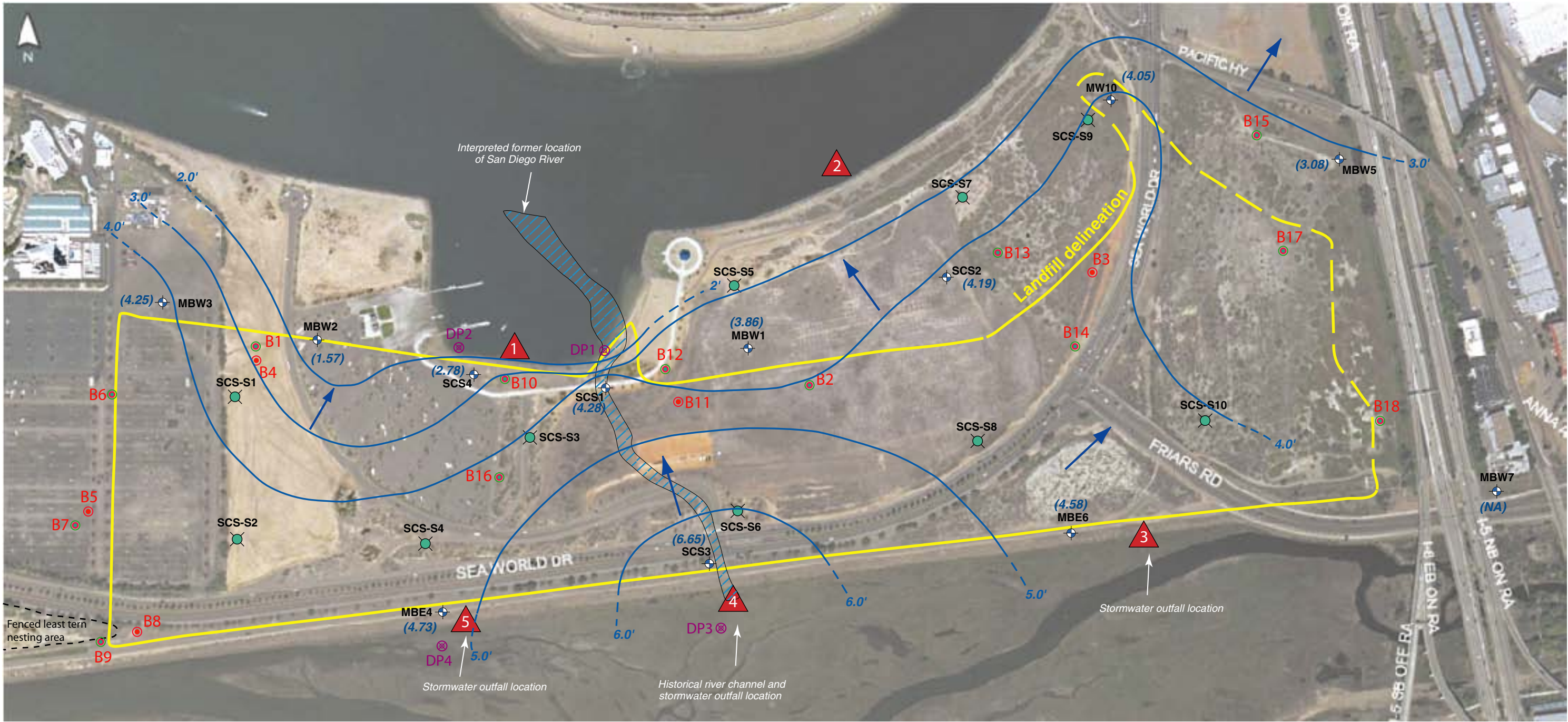
- Approximate location of test pits completed by Woodward Clyde (February 19 and 20, 1980).
- Interpreted landfill waste base elevation in feet above mean sea level
- 10'
- 5'
- 0'
- 5'
- 10'
- 5.0'
- Estimated groundwater contour in feet above mean sea level on October 16, 2004 at 12:00 p.m.

Interpreted landfill boundary.

Interpreted lateral extent of landfill waste inundated with groundwater

0 200 400 600
 Approximate Graphic Scale in Feet

SCS ENGINEERS ENVIRONMENTAL CONSULTANTS 8799 Balboa Avenue, Suite 290 San Diego, California 92123	ESTIMATED LANDFILL WASTE BASE City of San Diego Mission Bay Landfill San Diego, California		Project No.: 01203520.00
			Figure 6.4
			Date Drafted: 7/5/05



Note: Digital ortho-photograph provided to SCS by City of San Diego. Photograph dated March 2002.
Disclaimer: This figure is based on data provided by others. Actual conditions may differ. All locations and dimensions are approximate.

EXPLANATION

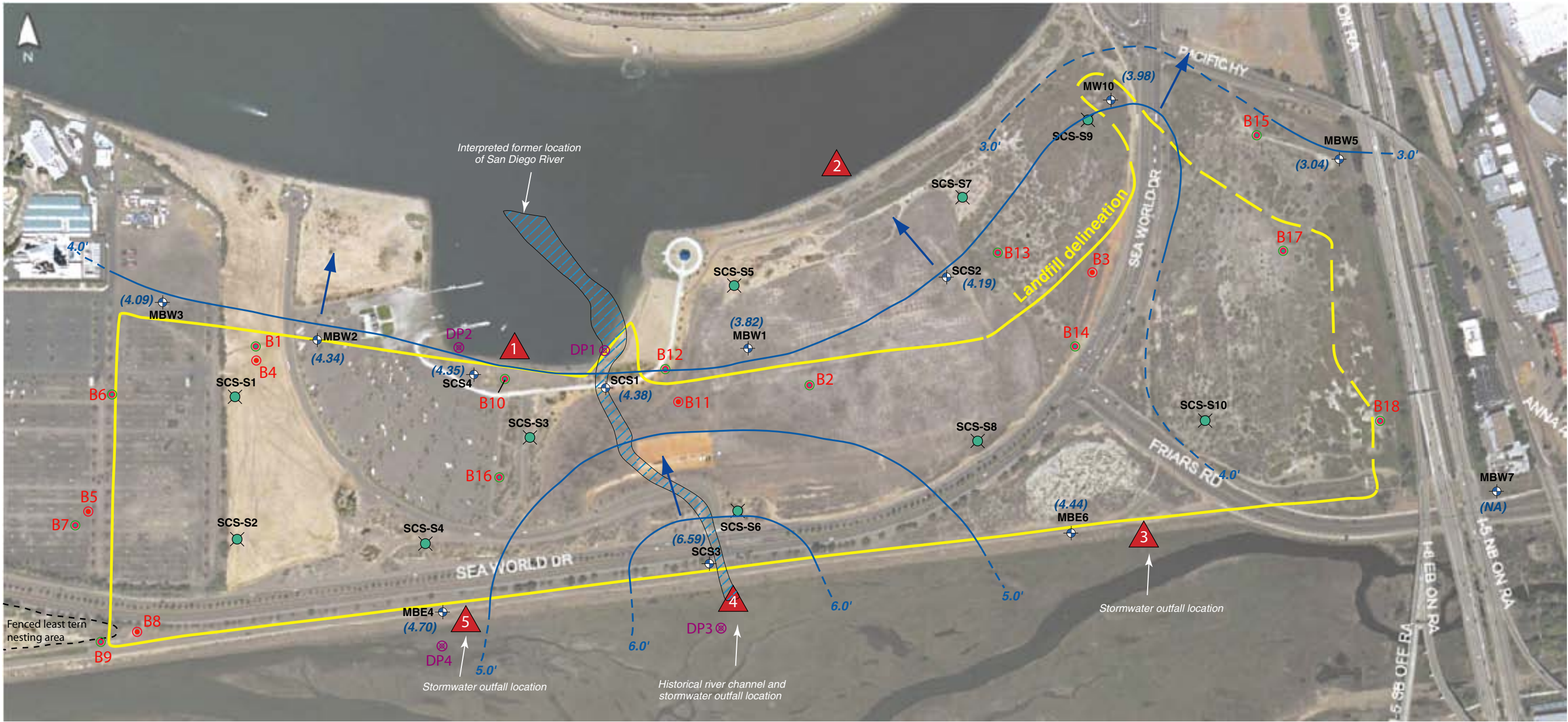
- Drive point locations
- Sediment sample locations
- Surface soil sample location (0 to 12 inches below grade collected by hand auger)
- Location and designation of existing monitoring wells.
- Boring location and designation where no soil and groundwater samples were collected for chemical analysis.
- Boring location and designation where soil and/or groundwater samples were collected for chemical analysis.
- Instantaneous groundwater elevation in feet above mean sea level (MSL) on October 14, 2004 at 4:13 pm.
- Estimated groundwater contour in feet above mean sea level.
- Interpreted groundwater flow direction.



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**HIGH TIDE (OCTOBER 14, 2004 @ 16:13)
GROUNDWATER ELEVATIONS**
City of San Diego
Mission Bay Landfill
San Diego, California


Project No.:
01203520.00
Figure 6.5
Date Drafted:
3/31/05





Note: Digital ortho-photograph provided to SCS by City of San Diego. Photograph dated March 2002.
Disclaimer: This figure is based on data provided by others. Actual conditions may differ. All locations and dimensions are approximate.


EXPLANATION


- 


Drive point locations
- 


Sediment sample locations
- 


(6.65) Instantaneous groundwater elevation in feet above mean sea level (MSL) on October 14, 2004 at 9:43 am.
- 

5.0' Estimated groundwater contour in feet above mean sea level.
- 

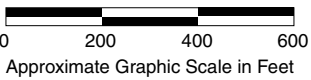
Interpreted groundwater flow direction.
- 

SCS-S7 Surface soil sample location (0 to 12 inches below grade collected by hand auger)
- 

Boring location and designation where no soil and groundwater samples were collected for chemical analysis.
- 

Boring location and designation where soil and/or groundwater samples were collected for chemical analysis.
- 

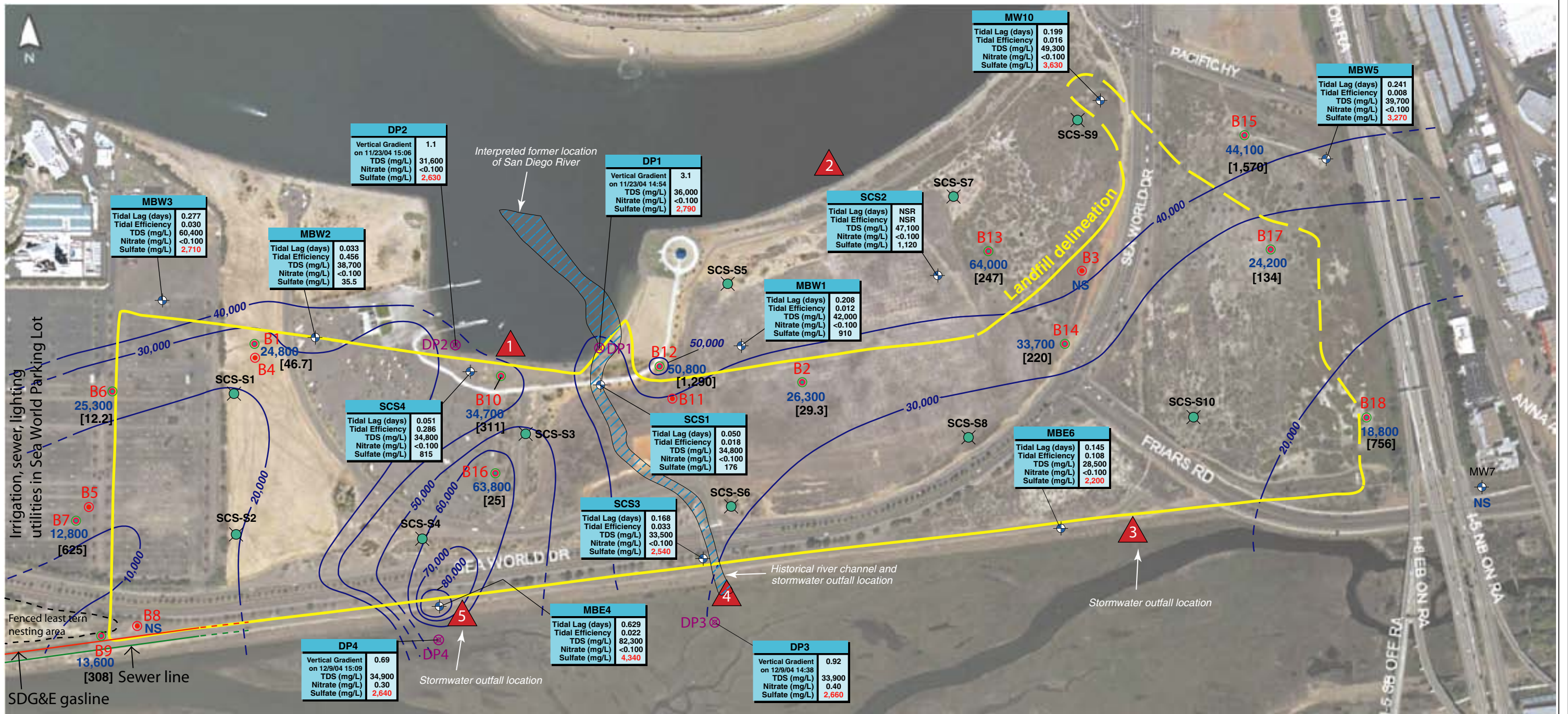
MW2 Location and designation of existing monitoring wells.



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**LOW TIDE (OCTOBER 14, 2004 @ 9:43)
GROUNDWATER ELEVATIONS**
City of San Diego
Mission Bay Landfill
San Diego, California

Project No.:
01203520.00
Figure 6.6
Date Drafted:
3/31/05



Note: Digital ortho-photograph provided to SCS by City of San Diego. Photograph dated March 2002.
Disclaimer: This figure is based on data provided by others. Actual conditions may differ. All locations and dimensions are approximate.

EXPLANATION

- Drive point locations
- Surface soil sample location (0 to 12 inches below grade collected by hand auger)
- Sediment sample locations.
- Boring location and designation where soil and groundwater were not sampled for chemical analysis.

- Boring location and designation where soil and/or groundwater samples were collected for chemical analysis.
- Location and designation of existing monitoring wells.
- Total dissolved solids in groundwater sample collected from soil borings. Results reported in milligrams per liter (mg/L).

DP4	Vertical Gradient on 12/9/04 15:09	0.69
	TDS (mg/L)	34,900
	Nitrate (mg/L)	0.30
	Sulfate (mg/L)	2,640

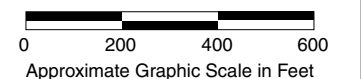
Vertical gradient value calculated from water level measurements observed in the temporary drive points subsequent to installation and sampling. Values greater than one suggest an upward gradient and values less than one suggest a downward gradient. Groundwater samples collected on same day as gradient measurements. Red denotes sulfate measurement > 2,000.

[25]	Sulfate in groundwater samples collected from soil borings Results reported in milligrams per liter (mg/L).
30,000	Interpreted groundwater TDS contour interval in mg/L.

MBE4	Tidal Lag (days)	0.629
	Tidal Efficiency	0.022
	TDS (mg/L)	82,300
	Nitrate (mg/L)	<0.100
	Sulfate (mg/L)	4,340

Tidal lag and efficiency values were calculated for the time period between 10/13/04 and 10/21/04. Groundwater samples collected by SCS Engineers on November 22 and 23, 2004. Red denotes sulfate measurement > 2,000.

NSR = No significant tidal response



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**PRE-FLOOD TIDAL ANALYSIS OUTPUT,
DRIVE POINT GRADIENT, AND WATER QUALITY**
City of San Diego
Mission Bay Landfill
San Diego, California









Project No.:
01203520.00
Figure 6.7
Date Drafted:
3/22/05



Note: Digital ortho-photograph provided to SCS by City of San Diego. Photograph dated March 2002.
Disclaimer: This figure is based on data provided by others. Actual conditions may differ. All locations and dimensions are approximate.

Please note that only soil boring and trench locations observed to penetrate landfill waste were used in the preparation of this figure

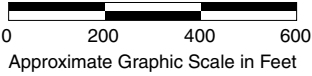
EXPLANATION

- | | |
|--|--|
|  Landfill gas well (five) installed by Woodward Clyde in March 1981. |  Monitoring wells installed by Ninyo & Moore in October 1993 (six wells) and December 1996 (two replacement wells). Wells are designated as MBW-1 through MBW-6, and MBE-4 and MBE-6. |
|  Soil borings (twenty) advanced by Woodward Clyde (April 1981). |  Monitoring wells (four) installed by SCS Engineers (September 2004). |
|  Landfill gas wells (five) installed by Woodward Clyde (September 1983). |  Boring location and designation where no soil and groundwater samples were collected for chemical analysis. |
|  Monitoring wells (twenty-five) installed by Woodward Clyde (September 1983). |  Boring location and designation where soil and/or groundwater samples were collected for chemical analysis. |

- 15% Estimated isoconcentration contours of percentage methane observed during field screening of landfill gas samples collected by SCS on May 26 to 28, and June 1 and 2, 2004.
- 30%
- 45%
- 50.4
0.18
1.23 Red denotes in excess of 1 ppm
- Landfill gas sample collection location with field measurements of methane percentage above hydrogen sulfide (H_2S) concentration in parts per million (ppm).
- Depth at which landfill gas screening values were obtained.



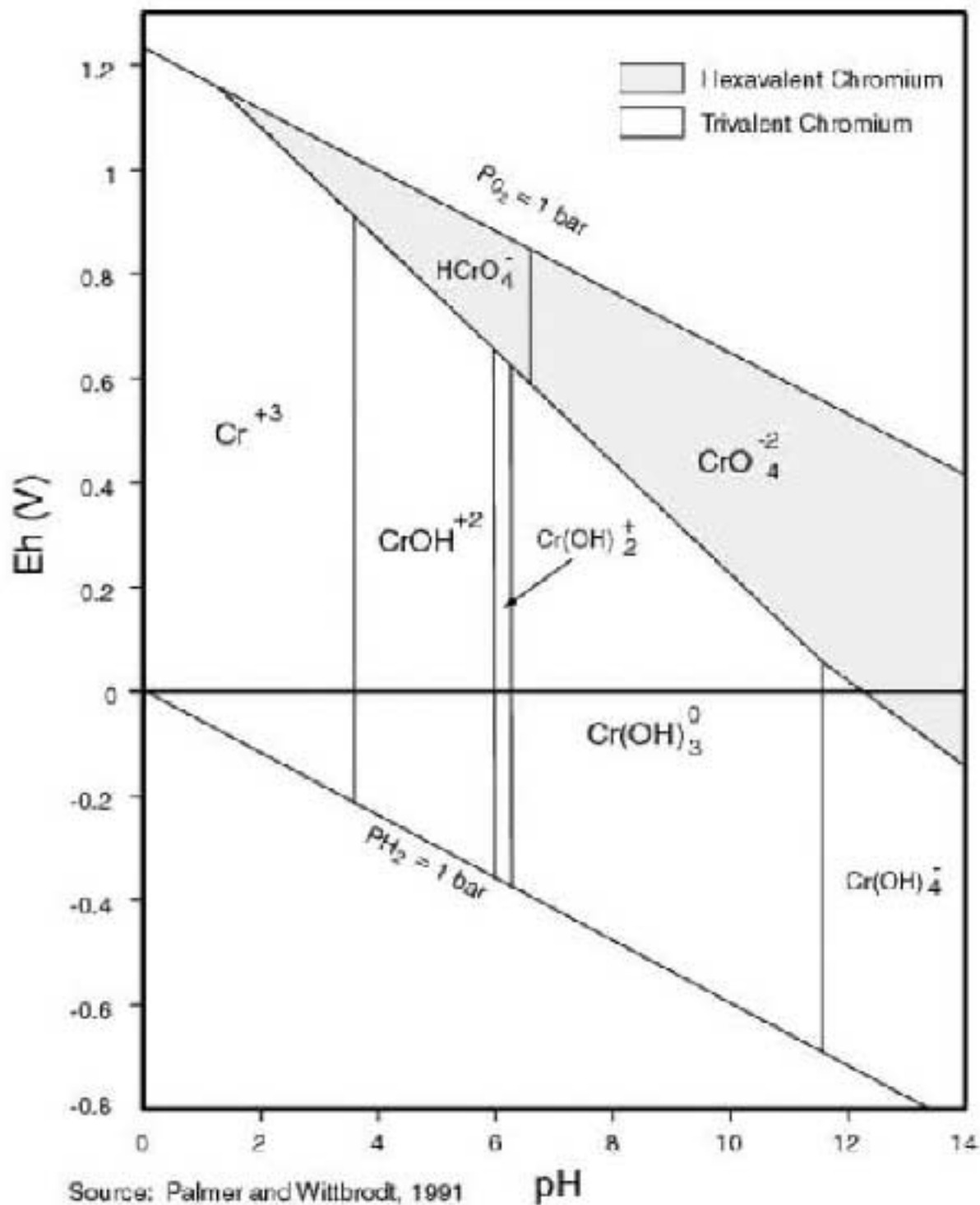
Interpreted landfill boundary.



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METHANE ISOCONCENTRATION MAP
City of San Diego
Mission Bay Landfill
San Diego, California

Project No.:
01203520.00
Figure 6.8
Date Drafted:
4/27/06



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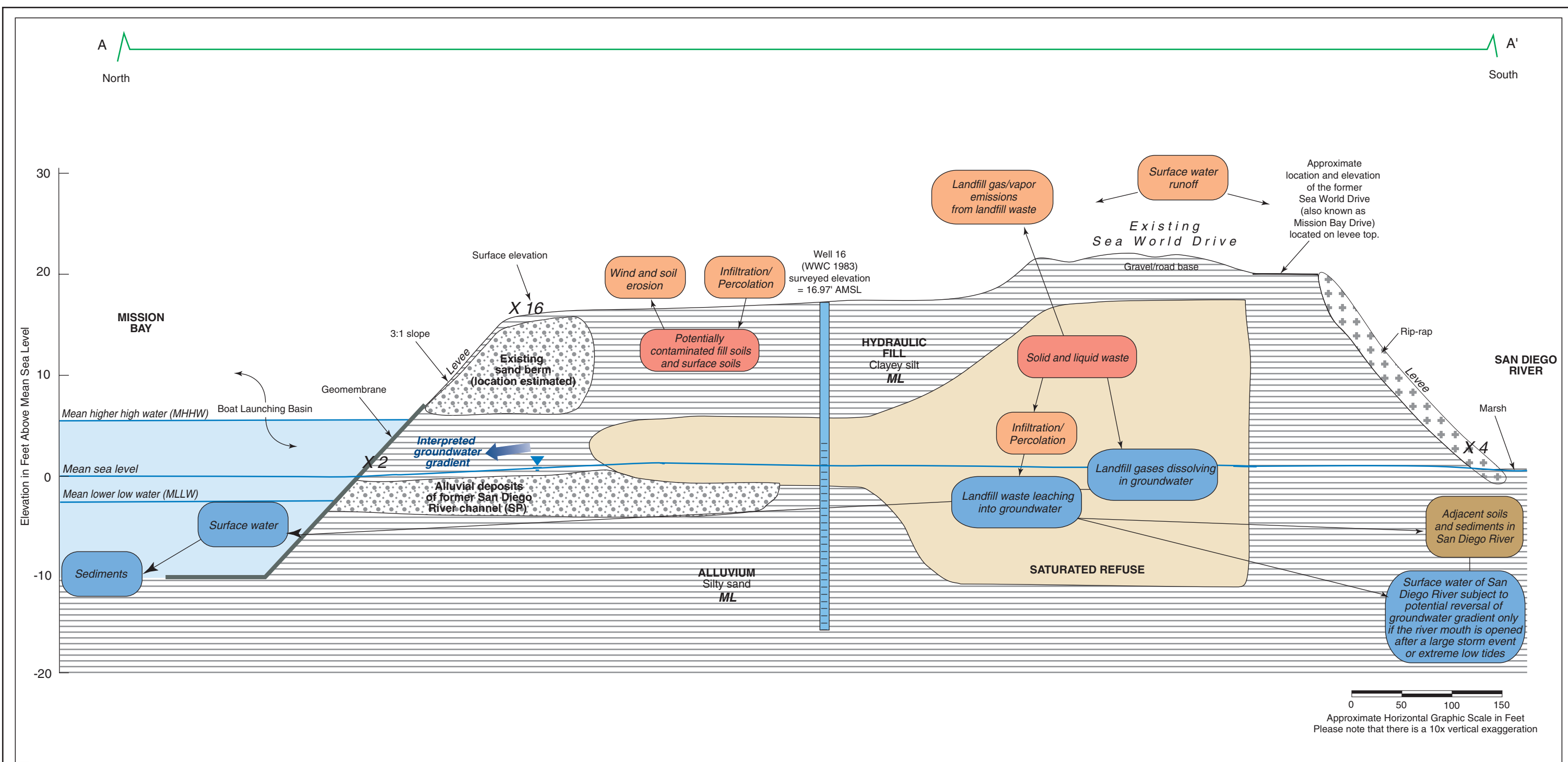
Eh-pH DIAGRAM SHOWING THE CHEMICAL STABILITY OF CHROMIUM

City of San Diego
Mission Bay Landfill
San Diego, California

Project No.:
01203520.00

Figure 6.9

Date Drafted:
8/12/05



EXPLANATION

X 16 Surveyed surface elevation in feet above mean sea level (AMSL).

ML Unified Soil Classification System (USCS) (Silty or clayey fine sands or clayey silts with slight plasticity), as identified by others.

Elevation of groundwater as measured in monitoring well.

Mean higher high water (MHHW) and mean lower low water (MLLW) are tidal datums that denote the tidal variation in Mission Bay.

Solid and liquid waste (Red boxes) Potential primary sources.

Adjacent soils and sediments in San Diego River (Brown box) Potential secondary source.

Vapor emissions from landfill waste (Orange boxes) Potential release mechanism.

Surface water (Blue boxes) Potential contaminant pathway.

Area of landfill waste. The landfill waste boundaries are approximate and based on historical documentation of refuse thickness. The documented landfill waste profile at well 16 is seven feet thick, however, the thickness in nearby wells is documented to be 18.5 feet thick, and historical photographs/landfill tracking logs indicate it may be as much as 25 feet thick at the former levee top/former Sea World Drive.

Location of geomembrane, installed during the construction of the boat basin in 1993. In general, the geomembrane lines the south and east boundaries of the excavated boat basin and has a minimum 3-foot sand cover. The geomembrane vertically extends approximately 50 feet south of the boat basin and approximately 230 feet on the east/southeast side of the basin.

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**SITE CONCEPTUAL MODEL
CROSS SECTION A- A'**
City of San Diego
Mission Bay Landfill
San Diego, California

Project No.:
01203520.00

Figure 7.1

Date Drafted:
3/2/04

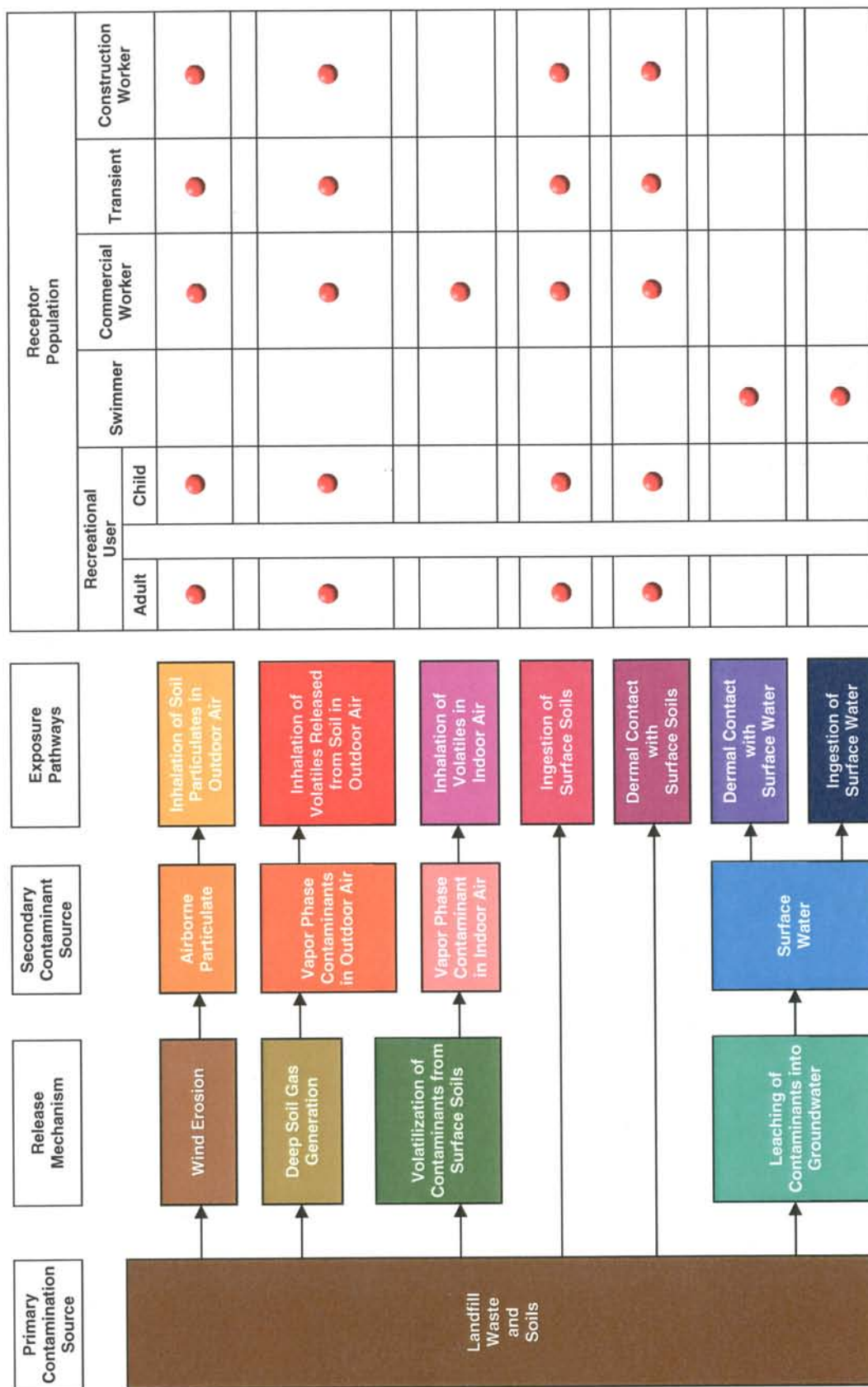
MISSION BAY LANDFILL
HUMAN HEALTH RISK ASSESSMENT CONCEPTUAL SITE MODEL

FIGURE 9.1

MISSION BAY LANDFILL
ECOLOGICAL RISK ASSESSMENT CONCEPTUAL SITE MODEL

